

Sound Ideas for the Internet

Helpful tools to use to help place audio on the web:

Sound Studio – shareware program that is indispensable for the Mac OS and it simple to use to record live performance. A variety of effects and filters are included. Download it at:

Felt Tip Software
www.feltip.com

Audacity – open source application that is cross platform and does most of the same audio work that Sound Studio can do. Download it at:

<http://audacity.sourceforge.net/>

iTunes – everyone's favorite jukebox can also convert audio files into a number of different formats.

Sound Converter - Many programs, iTunes and Sound Studio included, will convert sound files to different formats. Handy program that encodes to over thirty different formats. \$10 for the full version to encode files over 500k Sound Converter can be downloaded here and from other sites:

<http://www.dekorte.com/projects/shareware/SoundConverter/>

QuickTime Pro - \$29.95 from Apple but so helpful when trying to export audio and video into many different formats. *Rumor has it that it will be free in next version of Apple OS X....*

TextEdit – use for simple word processing and in this case used for HTML editing. Standard in Mac OS X. Be sure to change settings in the Preferences to handle documents as Plain Text as opposed to Rich Text Format.

Sound Formats and Brief Definitions

There are many sound formats but when downloading sounds from the Internet these are four popular formats.










AIFF (.aif or .aiff) – Audio Interchange File Format – originally developed by Apple. These are uncompressed sound files and will play in iTunes and on an iPod; but are much bigger than more popular formats described below.

WAV (.wav) – Waveform Data - a standard Windows audio format, similar to AIFF. Macs can play these uncompressed files too.

AAC (.m4a, .m4p, .acc) – Advanced Audio Coding–these are the building blocks that make up this compressed audio file was developed to fit the highest quality audio into the smallest file size. Using the same quality settings (i.e. bit rate, sample rate) sound quality in AAC to the ear is better, arguably, than MP3 and the file size is smaller. Apple uses this format in the iTunes store since it can be copy protected. When buying a song from the iTunes Music Store, the owner is only allowed to burn it to a CD seven times or play on a five different computers. Related to the file format .m4v that is used in video podcasting. For more information regarding the difference between the extensions above check out: www.m4a.com

MP3 (.mp3) – Moving Pictures Experts Group Audio, Layer 3 or MPEG-3 – this is the one you have all heard of, kids are using and has been the focus of the record industry news the past few years (even though the format is over 10 years old!) MP3s were the file used in Napster and if you “rip” audio from a CD into iTunes it can encode it in this format. Why are MP3s so popular? One reason is the small file size, usually around 10% of the original and the little loss of sound quality. The sound left after compressing an AIFF file to a MP3 file is basically all the sound a human ear can hear.

Comparison of Sound File Sizes

Name	Date Modified	Size ▾	Kind
 IrishTune48khz.aif	Today, 11:38 AM	21.8 MB	AIFF Audio File
 IrishTune.wav	Today, 11:39 AM	20 MB	WAVE Audio File
 IrishTune44hz.aiff	Jan 11, 2005, 7:25 PM	20 MB	AIFF Audio File
 IrishTune - Apple Lossless.m4a	Jan 12, 2005, 6:57 PM	4.6 MB	MPEG-4 Audio File
 IrishTune.mp3	Jan 13, 2005, 1:22 PM	2.3 MB	MP3 Audio File
 IrishTuneMono8Bit22kHz.aif	Today, 11:39 AM	1.9 MB	AIFF Audio File
 IrishTune.mp4	Today, 11:39 AM	1.8 MB	MPEG 4 Movie
 IrishTuneAAC.m4a	Jan 11, 2005, 8:03 PM	1.7 MB	MPEG-4 Audio File
 IrishTune.rm	Jan 14, 2005, 1:22 PM	1.4 MB	RealPlayer Media Files

A Bit about Bit Rates

The Bit Rate is the amount of tiny computer data – bits – that are used in one second of audio. In general, the higher the bit rate the higher the sound quality although bit rates are not equal across various formats. For example, an AAC file at 128kbps will sound “equal” to a MP3 file at 160 kbps although the AAC file will be smaller in size. For a more in depth comparison check out the following article:

<http://www.recordstorereview.com/misc/aacmp3part1.shtml>

Some links to find free sounds, music, and loops:

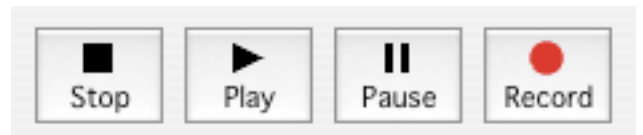
www.a1freesoundeffects.com
www.findsounds.com
www.partnersinrhyme.com
www.freeloops.com/freeloops/index.phtml
www.freesolopiano.com
www.freekidsmusic.com
www.wavcentral.com
www.flashkit.com/loops/
macidol.com
www.icompositions.com/
www.macloops.com/
www.thegaragedoor.com/
www.smartloops.com/

.... and many, many others online – they come and go quickly! Entering “Free Sounds” into your favorite search engine will provide many sites that contain a variety of sounds.

Live Recording Using Sound Studio/Audacity

Create your own audio files and convert them to WAV or AIFF formats at varying bit rates and sizes. Simple to use for recording student performances for evaluation.

1. Open Sound Studio or Audacity – found in the Applications folder.
2. Controls in the upper left are similar to



a tape deck. Top is Sound Studio – Bottom is Audacity



3. Press Record to begin recording – speak, sing, whatever into the microphone.
4. Save your file – typically save this file as an AIFF file.
5. This file can now be put up online or compressed using a tool like Sound Converter.